REVIEWS & NOTICES

Amazon Jungle: Green Hell to Red Desert? by R. J. A. GOODLAND & H. S. IRWIN. Elsevier Scientific Publishing Company, Amsterdam–Oxford–New York: [ix +] 155 pp., figs & tables, 24.9 × 16.8 × 1.3 cm, Dfl. 33.00, US $13.75, 1975.

This report, described by its authors as the nearest to an environmental assessment of the Transamazônica highway construction project available, constitutes a concise and well-argued exposition of an alarming threat to our planet's largest remaining natural area. The authors' balanced and clear evaluation of the ecosystems of the Amazon basin are a warning to short-term political and commercial speculators about the disastrous future prospects, both for themselves and for the indigenous Amerindians, of large-scale development and hence destruction of a hitherto self-sufficient area. The short-term economic gain derived by modern Man from agricultural and highway development in the forest zone carries with it overwhelming dangers of long-term problems. Disease (adequately coped with by the present ecological conditions), soil erosion, and a decline in fertility leading to crop failure, will be the inevitable results of large-scale deforestation. For when once the rain-forest has been cleared, soil fertility in these regions is so short-lived that some forest clearings, it is stated, fail to provide even a second harvest.

Having had many years' experience of farming in Brazil, I am very much aware of the steadily increasing numbers of people migrating from heavily populated parts of north-east Brazil to seek work in the more developed central and southern areas. The present report thus highlights the problem of where to find employment for this population overspill, and its warning about irreparable environmental damage is only one voice against mounting pressure on the part of the Brazilian Government to seek expansion of employment—and thus agricultural development—in the vast Amazon basin.

As a study of scientific integrity and exhaustive technical data, this report has the added attractions of conciseness, readability, and good illustration in the form of diagrams and tables, which combine to make it a welcome introduction to the subject for the layman, as well as being of real value to the specialist.

The implications are frightening: is the Amazon jungle to become a man-made desert, threatened with an eventual sterility and long-term uselessness in the manner of the Sahara desert today?

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The Amazon River of Brazil, by HILGARD O'REILLY STERNBERG. (Erdkundliches Wissen Heft 40, with German Summary.) Franz Steiner Verlag, Wiesbaden: ix + 74 pp., figs and tables, 24 × 17 × 0.5 cm, stiff paper covers, DM 18.00, 1975.

This short study of the Amazon River, while presenting well-researched data, seems basically of more importance to the student of geography and only of fringe interest to those concerned with environmental conservation. Some of the same material discussed in *Amazon Jungle: Green Hell to Red Desert?* * is covered, for example the construction of the Transamazônica highway, but on conservation issues the author remains neutral throughout. The wider implications of the development of an area of ecological concern are not discussed, and the study lacks a framework or structure, which the author himself admits.

Although intrinsically of interest, and a valuable contribution to the technical literature of the area, this is essentially a study written by a geographer for geographers, and has no immediate message for the wider world.

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* Reviewed above.—Ed.

Energy: Future Alternatives and Risks, edited by the ACADEMY FORUM of the National Academy of Sciences. Ballinger, Cambridge, Massachusetts, U.S.A., and John Wiley, Baffins Lane, Chichester, Sussex, England: ix+ 229 pp., illustr., 23.5 × 15.5 × 2.1 cm, £5.70, 1975.

How should a large country such as the United States cope with the various economic, social, and political, problems emerging from the so-called 'energy crisis' following the sharp increase in oil prices encountered since the winter of 1973–74? Although not very original, since quite a number of meetings had already examined it, this question was the subject of a two-days public meeting held in January 1974 by the Academy Forum, a medium set up by the U.S. National Academy of Sciences for the public consideration of major national concerns involving science and technology.

The book contains a collection of contributions presented by leading American authorities in the field of energy and also records of the ensuing debates. It is divided into two parts, dealing respectively with alternatives of supply and demand and with benefits and risks of institutional stability. As expected from the title of the meeting and book, environmental considerations were not the focal point of the discussions. However, a significant part of the debates was devoted to this topic—particularly concerning a proposition that environmental controls might impede the supply of energy. The answers were mostly 'yes, but' or 'no, but', the substantive part being not whether the reply was 'yes' or 'no' (a matter of personal relativity) but the content of the 'but' section of the answer. A large variety of views were expressed, coming around frequently to the idea that environmental controls in the field of energy have long-lasting and far-reaching social and political implications.

These considerations logically led the meeting to examine benefits and risks of institutional stability, resulting mainly from the expansion of nuclear power. This topic was dealt with, among others, by Robert Seamans and Alvin Weinberg. This second part of the book undoubtedly provides a comprehensive review of the question and is surely of paramount importance because of the numerous future implications that may result from present-day decisions.

All in all, and although it does not open new ways of solving energy problems nor concentrate on environmental issues, 'Energy: Future Alternatives and Risks' merits a place on the energy shelf in the library of any environmentalist, as it deals with fundamental questions, avoids the trap of complicated technical descriptions, and makes easy reading.

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